ABSTRACT—For several decades, researchers have examined how children develop autobiographical memory, demonstrating that even young children report useful information about their experiences. However, the way adults question children influences profoundly the amount and nature of what children report. This research is relevant for many contexts in which children are questioned (e.g., criminal investigations, courtroom proceedings, clinical settings). In this article, we briefly review developmental changes in how children respond to various kinds of questions. And we reflect on the implications for research and practice when children are interviewed to determine what they have experienced.

KEYWORDS—children; forensic interviews; questioning; eyewitness testimony

Alleged victims of child maltreatment can provide critical information to investigators and adjudicators. In this article, we review the impact and importance of adults’ interviewing strategies on what witnesses report. This research is relevant for a range of contexts in which children describe their experiences accurately (e.g., as witnesses to a crime, in family court, and as medical patients).

Children’s capacity to describe their experiences accurately became the focus of increased research attention in the early 1980s, following a series of high-profile cases in which children alleged abuse by adults who took care of them. This research examined factors thought to affect children’s eyewitness testimony, including developmental changes, the impact of the interval between experiences and interviews about them, and the ways in which children were questioned, as well as how children construct narratives about the past. For example, the sociocultural theory of autobiographical memory (1) explained how early conversational exchanges between parents and their children helped shape children’s subsequent development of memory and their abilities to recount experiences. Research in all these domains has challenged perceptions of children’s eyewitness capacities that were initially skeptical. In this article, we focus on how appropriate questioning can foster accurate responding by children. A complementary body of research has examined how the way children are questioned can also influence children’s false responding, especially when the questioning is suggestive (2). Together, the two bodies of research have shown how to establish optimal conditions for children to describe their experiences in a complete, organized, and accurate manner.

A primary influence on what children say and how they structure their accounts of experiences is the type of question posed to them. We begin our review by summarizing research on the impact of interviewers’ questions on how children respond, considering developmental differences in the effectiveness of various types of questions and other factors that affect the progression of interviews. We then describe the development of a flexible interviewing protocol that helps interviewers follow evidence-based guidelines for developmentally appropriate interviewing, and we summarize research evaluating its effectiveness. Finally, we consider the implications of this research for forensic interviews and other contexts in which adults question children to ascertain their knowledge and perspectives, and outline possible areas for continuing research. (See 3, for a more complete discussion of these issues.)
THE IMPACT OF INTERVIEWERS’ QUESTIONS ON CHILDREN’S RESPONSES

Research using different approaches—including controlled laboratory-based experiments that manipulate factors thought to influence how and what children recall about an event, and field-based work examining the conduct of forensic interviews designed to determine whether children have been abused—has informed our understanding of how interviewers’ questioning strategies influence children’s responses. Despite different approaches, researchers have reached consistent conclusions. Although older children typically provide more detailed accounts than younger children, especially during spontaneous or free recall, accuracy remains surprisingly stable with age—at least when children respond to open-ended questions (4). The type of question asked affects the amount, accuracy, and organization of children’s responses. Broad open-ended prompts (e.g., “Tell me everything you remember about that”) and those that use open-ended prompts to encourage children to elaborate on previously reported information (e.g., “You told me that he took you to that special place. Tell me more about that special place”) are associated with greater accuracy (5), more forensically important information (6), and fewer inconsistencies (7) than close-ended questions. Children also provide more coherent and organized responses when responding to open prompts than they do when responding to closed prompts (8). More focused open-ended (cued recall) questions that ask for specific details (“wh-” questions, e.g., “When did this happen?”) understandably tend to elicit fewer details, but also result in more errors (5) and inconsistencies (7) than broader open-ended prompts. Closed prompts (e.g., yes/no or multiple choice questions) elicit fewer details (9, 10) and more errors and inconsistent statements (7, 11) than any of the other types of prompts or questions just discussed.

Developmental Differences in Responses to Interviewers’ Questions

With age, children respond more competently to open-ended questions. While 3- to 4-year-olds can respond informatively to broad open-ended questions (e.g., “Tell me everything you can remember about that”), children of this age tend to respond more to focused open-ended questions (e.g., “What happened?”). Broader open-ended prompts may not provide preschoolers with sufficient structure and scaffolding for them to comprehend the questions (10, 12). “Wh-” prompts also provide more concrete retrieval cues that signal the category of information on which to focus. In one study (13), 3- to 4-year-olds provided more information in response to focused prompts (e.g., “wh-” questions) than to more broadly open ones, whereas the reverse was true for 5- to 6-year-olds. From about age 5, developmental differences in relation to the effectiveness of different prompts become less apparent than during the preschool years.

Differences in the effectiveness of distinct types of questions are also apparent when considering children with varying degrees of developmental delay. In studies of children with intellectual disabilities, children with mild cognitive impairment compare generally to typically developing children matched for developmental level, whereas children with more severe intellectual disabilities are less proficient than young typically developing children (14). Even children with moderate levels of intellectual disability can respond informatively to open-ended prompts, challenging presumptions that such questions are unproductive with these children. However, as with younger typically developing children, children with intellectual disabilities respond most informatively to more focused open-ended prompts. Thus, although typically developing children depend less on interviewer-provided structure as they grow older, children with intellectual disabilities continue to need such support more than children of the same chronological and mental age.

Other Influences on Children’s Reporting

Interviewers seldom interview children with no knowledge of what has been alleged. Assumptions about likely explanations for the allegations under investigation may shape the kinds of questions interviewers pose and limit children’s opportunities to provide information that supports an alternate interpretation. In other words, interviewers’ biases may spur lines of questioning designed to confirm particular hypotheses or explanations rather than test other explanations (15), thus exerting undue influence on what the child reports, even if the questions used are open-ended. Children’s responses may also be shaped by the nonverbal cues that accompany questions. For example, an interviewer’s tone, gestures, and facial expressions may convey information about expected responses or selectively reinforce responding (or nonresponding), as might repetition of questions (16). Furthermore, if a child has been subjected to suggestive interviewing prior to the formal interview (e.g., during informal questioning from caregivers or teachers, or exploratory interviews from professionals like doctors or social workers), the effects of such questions may persist in subsequent interviews even if they are conducted optimally (15). Exposure to misinformation before an interview can lead some children to incorporate that (false) information into their accounts, and postevent information may become incorporated into children’s representations of the experiences, changing irrevocably how they remember them. Thus, open-ended questioning is not a panacea for avoiding other influences that can shape how children respond in an interview (17), but it is the most useful approach for minimizing the likelihood and impact of contamination by the interviewer.

Knowledge Versus Practice: Discrepancies in Forensic Interviewing Practice

Because these findings have such obvious and immediate implications for investigative practice, professional guidelines around
the world have long promoted open-ended questioning (18). Unfortunately, interviewers in many countries typically do not adhere to best-practice principles (e.g., Canada [19]; New Zealand [20]; United Kingdom [21]; the United States [22]). Several factors may explain why: Interviewers may have difficulty adopting a communicative style that differs from typical Adult × Child interactions (23) or they may disregard the evidence base underlying recommended practice in favor of more intuitive assumptions about children’s capacities and effective interviewing practices (24). They also may monitor inaccurately their use of recommended strategies, thus overestimating their adherence to best-practice recommendations (25). Whatever the reason, interviewers struggle to translate knowledge of how they should interview into actual practice. To address this problem, researchers at the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) created a structured interview protocol that put into operation research-based recommendations to help forensic investigators conduct developmentally appropriate interviews with children (26). Copies are available online in many languages (see NICHDProtocol.com).

The NICHD Investigative Interview Protocol
The NICHD Investigative Interview Protocol comprises three main phases. During the presubstantive phase, interviewers develop rapport with children by asking them to talk about their everyday experiences and things they enjoy doing. Children are introduced to the ground rules of the interview (e.g., they are told they can say, “I don’t know” and can correct the interviewer if they make a mistake, they are instructed about the importance of telling the truth and not guessing), and then practice recalling a recent event in response to open-ended questions.

Researchers then introduce the substantive phase by asking the children what they have come to talk about that day. A series of progressively more specific prompts are suggested for interviewers to use, in sequence, should children not respond to the initial open-ended prompt. The questions were formulated, in conjunction with legal advisers, to be minimally leading and thus admissible in court. The substantive phase progresses flexibly, but emphasizes the importance of using broadly open-ended prompts to elicit as much information as possible. One of the distinctive features of the protocol is the advice to use children’s responses as cues for further information (cued invitations), resulting in a child-directed rather than an interviewer-directed retrieval process. When focused questions are posed (e.g., “wh-” or option-posing questions needed to clarify ambiguous statements or elicit information not provided in response to a more open prompt), interviewers are trained to return immediately to open-ended questions designed to elicit further details (pairing). When children indicate that there were many instances of abuse, the NICHD Protocol recommends eliciting a description of the most recent incident first, followed by the first incident, and then any other specific well-remembered incidents (e.g., “the time in the bathroom,” “the time when you were camping”) before concluding with a discussion of a neutral event.

In the third phase of the interview, closure, interviewers discuss a neutral topic unrelated to the abuse allegation and advise the children what to do if they recall anything further they wish to report.

Research With the NICHD Investigative Interview Protocol
Researchers have examined the impact of using the NICHD Protocol in interviews with children in several countries (27). Typically, researchers have evaluated the conduct of interviews during a baseline phase, then trained interviewers to use the NICHD Protocol, and analyzed a comparable set of interviews following training (matched as closely as possible for variables such as characteristics of the child and allegations made). When interviewers followed the NICHD Protocol, children provided proportionally more information in response to open-ended prompts and did so earlier in the interview, and interviewers increased their use of open-ended prompts and limited their use of closed prompts. As seen in the research summarizes earlier, by increasing their use of, and children’s opportunities to respond to, open-ended prompting, interviewers can increase the quality of children’s evidence and minimize the reporting of false details (28). In particular, cued invitations helped children elaborate on their spontaneous accounts (5), and pairing open-ended questions with more focused questions improved interviewing quality (29). Furthermore, in another study (30), children grasped temporal concepts more effectively than had been suggested by previous research.

Researchers have examined the usefulness of the NICHD Protocol in studies involving different populations, including young children (4- to 8-year-olds; 31), those with intellectual disabilities (14, 32), witnesses (33), and alleged child perpetrators of crimes (34). They have also studied other outcomes: For example, in one U.S. jurisdiction, using the NICHD Protocol increased the number of suspects charged and found guilty of child sexual abuse (35).

However, even when interviewers follow the NICHD Protocol, some children are reluctant to cooperate and do not disclose abuse they have experienced (36). As a result, researchers have examined the effectiveness of supportive interviewing strategies that address socioemotional factors that may foster uncooperativeness and reluctance (37, 38). Informed by this research, a revised version of the NICHD Protocol has increased the willingness of abused children to disclose abusive experiences (39) and further revisions are now being tested.

The way children are prepared for their role as informants influences how they respond to subsequent questioning (5, 40). In the forensic setting, children must learn about their unique role as experts and the associated expectations that they describe what happened to them in more detail than would be expected in other contexts (23). Allowing children to practice narrating recent experiences prior to talking about the event of
interest has proved effective, as has considering the style of questioning adopted in the preparation phase, with children benefiting most from broadly open-ended prompts.

IMPLICATIONS

Given the contribution of children’s testimony to legal and child protection investigations, forensic interviews must be conducted in accordance with practices informed by empirical research. Such practices enhance the quality of the information children provide, improving the likelihood of successful prosecution and intervention when children are maltreated, and protect against the harm of falsely accusing adults. Beyond the forensic context, the research summarized here has implications for the study of developmental psychology more broadly. For example, many researchers interview children in a range of contexts to assess their knowledge. Researchers should prepare children adequately (by building rapport, providing practice, and establishing the rules of the session) prior to the critical questioning, and their questions should be framed in open-ended ways to elicit children’s knowledge most effectively and minimize interviewers’ bias. However, researchers typically do not follow this guidance, even when they are studying questions of forensic relevance. For example, many researchers have examined the effectiveness of using visual aids such as dolls, diagrams, and drawings to facilitate children’s recall (see 41, for a review). These studies usually use restricted verbal interviewing protocols, with brief sets of open-ended questions followed by directive cued recall questions and often, recognition-based questions. The relevance of the findings of these studies to forensic interviews in which children are prepared appropriately for their task as informants and are questioned effectively is thus questionable. Indeed, drawings and diagrams used in conjunction with an elaborate interviewing protocol such as the NICHD Protocol may not offer additional benefits (42). Researchers who design and review studies using interview methods should consider the impact of the types of questions when evaluating their findings and implications.

LOOKING AHEAD

Despite recent improvements in interviewing practice following the adoption by many jurisdictions of the NICHD Protocol, further improvement in interviewers’ practice is warranted. We need to understand more fully why interviewers use the strategies they do so we can identify how to promote adhering to best-practice tenets. Researchers have demonstrated that regular and focused guidance and supervision promote effective interviewing practices (43, 44), yet the available pool of qualified and experienced supervisors is limited. As a result, we should invest in research examining other ways to access supervision and review practice (e.g., Web-based supervision, self-reflective exercises; 45). We should also develop evidence-based guidelines for interviewing subgroups of child witnesses, including those with specific developmental disorders (e.g., attention deficit hyperactivity disorder, autism spectrum disorder, language delays) and physical impairments (e.g., loss of sight and hearing). We know little about best practices for interviewing young suspects and the effectiveness of using witness-oriented interviewing with children and adolescents. The principles of memory and communication in the NICHD Protocol may also facilitate well-organized, detailed, and accurate narratives from adult witnesses, but this remains to be tested.

CONCLUSION

Research examining children’s eyewitness testimony and the impact of interviewing strategies on their accounts provides a context in which to show how the development of abilities often studied in isolation and in controlled contexts come together when children talk about their experiences, at times revealing unanticipated competencies. Such studies can, in turn, inform research on aspects of children’s development, spurring questions about how, when, and how well children can call upon developing cognitive and social competencies. Just as in other contexts where children learn from the adults around them, in forensic interviews, children learn from unfamiliar adults even in brief interactions, with the style of interaction assuming importance. Adults have a profound impact in shaping what children include in their accounts, and can easily undermine children’s competency when they are describing the past and telling us what they know.

REFERENCES